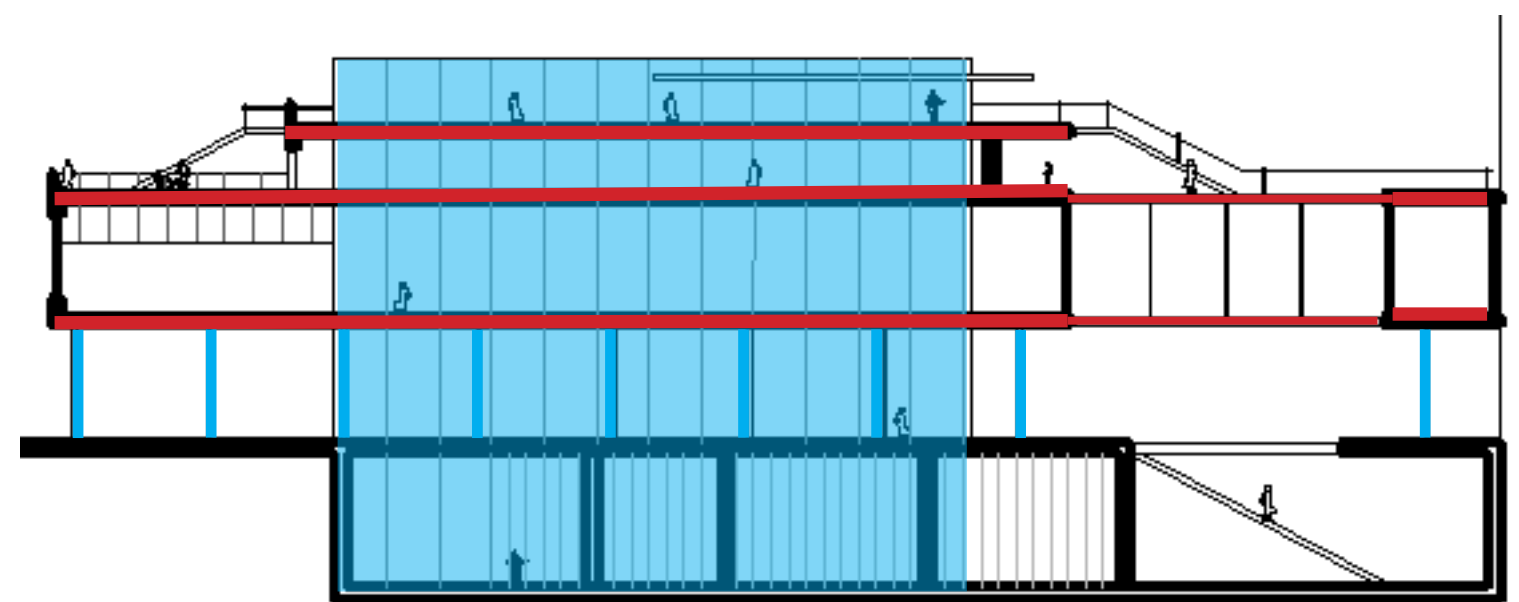
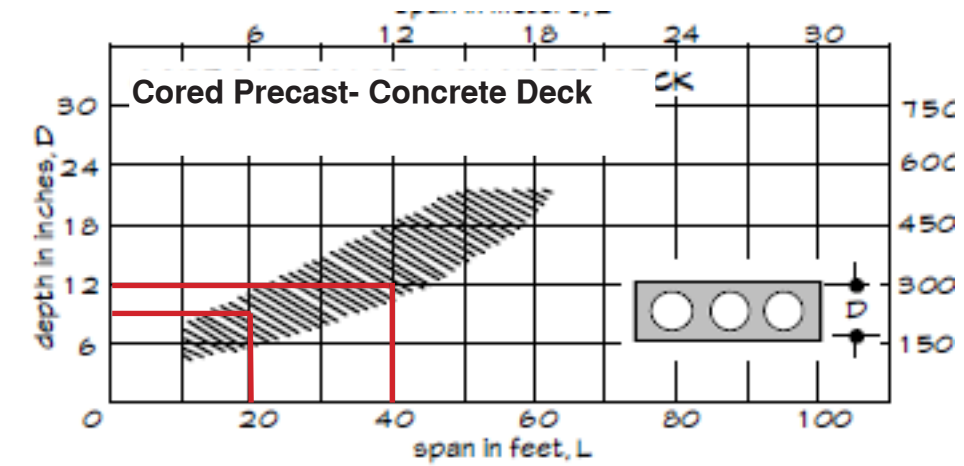


Structural Bay

Explaining the concrete decking floor loads (in red) on the structure members in (blue). The structure is made up of a concrete core and concrete columns help support the loads of the project in the first floor of the building. The total dead load of the floor structure members sums out to be 24,600 sq. ft but with calculating the 15,700 sq. ft of walls and 8,160 sq. ft of glass members the total dead load comes out to be about 48,460. To take account of live loads the structure holds up double of the calculated dead load that comes out to a total of about 97,000sq. ft. The concrete core that has an area of 1,930sq.ft is responsible for 1/3 of the loads leaving 64,666sq ft to be distributed into the 13 bays that are roughly 18ft X 22ft. Since the plan is not consistent and each floor has different square footage at different areas some bays will carry more load than others, but roughly each bay is 425sq.ft and is responsible for 4,974 sq. ft.



## Loads